

## 101.10 Stainless Steels (disk form)

Technical Contact: [john.sieber@nist.gov](mailto:john.sieber@nist.gov)

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

Elemental Composition (mass fraction, in %)

SRM	Description	C	Mn	P	S	Si	Cu	Ni	Cr	V	Mo	Co	Ti	N	Al	Nb	Ta	W	Pb	Zr
C1151a	23Cr-7Ni	0.034	2.39	0.017	0.038	0.29	0.385	7.25	22.59	0.040	0.79	0.033		(0.21)	(0.003)	(0.015)	(0.004)		0.0039	
C1152a	18Cr-11Ni	0.142	0.95	0.023	0.0064	0.64	0.097	10.86	17.76	0.033	0.44	0.22		(0.055)	(0.004)	(0.15)	(0.001)		0.0047	
C1153a	17Cr-9Ni	0.225	0.544	0.030	0.019	1.00	0.226	8.76	16.70	0.176	0.24	0.127	(0.013)	(0.11)	(0.004)	(0.48)	(0.03)		0.006	(0.0001)
C1154a	19Cr-13Ni	0.100	1.44	0.06	0.051	0.53	0.44	13.08	19.31	0.135	0.068	0.38	(0.004)	(.077)		(0.22)	(0.045)		0.017	(0.001)
1155	Cr-Ni-Mo (AISI 316)	0.046	1.63	0.020	0.018	0.502	0.169	12.18	18.45	0.047	2.38	0.101							0.001	
1171	Cr-Ni-Ti (AISI 321)	0.067	1.80	0.018	0.013	0.54	0.121	11.2	17.4		0.165	0.10	0.34							
1172	Cr-Ni-Nb (AISI 348)	0.056	1.76	0.025	0.014	0.59	0.105	11.35	17.40		0.22	0.12				0.65	<0.001			
1219	Cr-Ni (AISI 431)	0.149	0.42	0.026	0.001	0.545	0.162	2.16	15.64	0.056	0.164	(0.04)	(<0.001)	0.078	(0.001)	(0.01)	Sn (0.008)	(0.02)	(<0.0001)	B (<0.001)
1223	Chromium Steel	0.127	1.08	0.018	0.329	0.327	0.081	0.232	12.64	0.068	0.053	Mg (<0.0005)		(0.05)	(<0.005)		Sn (0.004)		Ca (<0.0005)	(0.0001)
C1287	High Alloy (AISI 310 mod.)	0.36	1.66	0.029	0.024	1.66	0.58	21.16	23.98	0.09	0.46	0.31	0.050	(0.034)	(0.06)	(0.07)	O (0.017)		0.008	(0.006)
C1288	High Alloy (A-743)	0.056	0.83	0.023	0.010	0.41	3.72	29.3	19.55	0.086	2.83	0.10	0.012	(0.028)	(0.0025)	(0.22)	O (0.029)	(0.2)	0.0041	(0.002)
1295	Cr (SAE 405)	0.027	0.387	0.022	0.0003	0.321	0.260	0.194	13.52	0.082	0.023	0.020	(0.01)	Sn (0.02)	(0.20)	(<0.0005)	(<0.001)	(0.002)	(0.0001)	As (0.006)
C1296	28Cr-3Mo (SAE 460)	0.038	0.256	0.024	0.013	0.66	0.056	0.373	27.90	0.134	3.43	0.026	0.23	Sn (<0.01)	0.035	0.20	(<0.001)	(<0.01)	(<0.001)	As (<0.01)
1297	Cr-Ni-Mn (SAE 201)	0.066	7.11	0.038	0.0033	0.397	0.442	5.34	16.69	0.080	0.331	0.127	(<0.0004)	Sn (<0.010)	(0.003)	(<0.009)	(<0.001)	(0.03)	(<0.0001)	As (0.005)

Values in parentheses are not certified and are given for information only.